

Flora of the Pacific Northwest

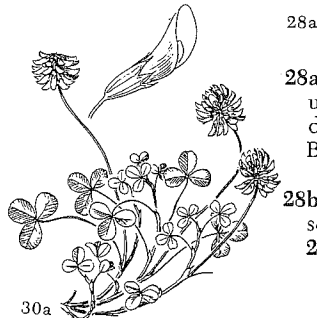
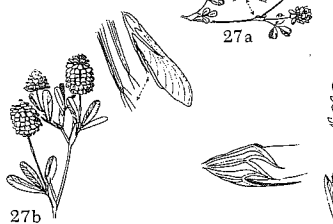
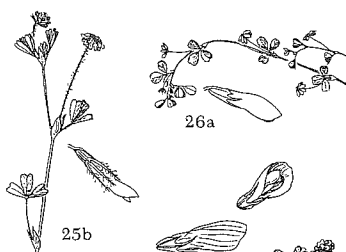
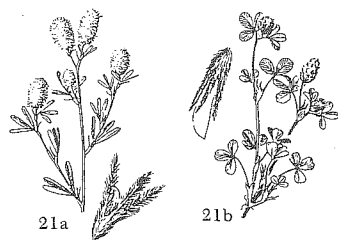
AN ILLUSTRATED MANUAL

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SEATTLE AND LONDON



length of tube; fllets linear-oblongate; pl erect, 1-4 dm; occ escape in old fields and waste places, mostly w Cas, intro from Europe; hare's-foot

18 *T. arvense* L.

21b Corolla purplish, often subequal to calyx or even longer; calyx teeth mostly > twice length of tube; fllets oblongate to obcordate; pl ascending to erect, 1-3 (5) dm; coastal to mont, BC to Baja Cal; rancheria c., Macrae's c.; 2 vars.

19 *T. macraei* H. & A.

a1 Calyx rarely > corolla, teeth 2-3 times > tube; VI, w Wn, s Ore to Cal (*T. d.*)

var. *dichotomum* (H. & A.) Brew. & Wats.

a2 Calyx mostly > corolla, teeth 3-6 times > tube; Wn and Ore to Baja Cal (*T. a.*)

var. *albopurpureum* (T. & G.) Greene

18b Calyx glab or pubescent on teeth, the tube wholly glab or hairy only adj to teeth

22a Calyx teeth strongly fimbriate-denticulate, upper 2 much larger than lower 3; fls white to purplish, 6-12 mm; w Cas, s Wn to Cal; foothill c., tree c. (*T. ciliatum* Nutt.)

20 *T. ciliatum* Benth.

22b Calyx teeth nearly or quite entire, upper 2 often smaller than lower 3

23a Fls in part sterile; fertile (normal) fls (1) 2-7 per head, white or cream-colored; calyx 5-6 mm, ca half as long as corolla, teeth (lobes) filiform-setaceous, ca = tube; sterile fls gradually developing in center of head (above fertile ones), represented by rigid, terminally divaricate-spinulose processes (calyces?), becoming reflexed over maturing 1-seeded pods and transforming each head into a burlike structure which, by reflexion of peduncles, tends to become buried; European; occ intro for grazing purposes in US and now estab near CRG in Hood R Co, Ore, and adj Wn, n to PS region, Wn, and sw BC; subterranean c. or t.

21 *T. subterraneum* L.

23b Fls all normal, gen \propto (> 7), gen yellow or pink to purple; heads never burlike

24a Fls white to pink or purplish; calyx 10-nerved; native spp.

25a Calyx teeth lanceolate-acuminate, glab; fls 5-9 mm; calyx tube > 1.5 mm on upper side, upper teeth mostly much the largest; rachis of infl often prolonged above fls; grassy knolls w Cas; occ in Wn, common s to Baja Cal; slender c.

22 *T. gracilentum* T. & G.

25b Calyx teeth slender, acicular, sparsely villous-pilose; fls 5-7 mm; calyx tube not > 1.5 mm on upper side, upper teeth scarcely larger than others; rachis of infl not prolonged beyond upper fls; mostly w Cas, Klickitat Co, Wn, s to s Cal; Pinole c. (*T. hallii*); ours the var. *decipiens* Greene

23 *T. bifidum* Gray

24b Fls yellowish, fading to brown; calyx 5-nerved; intro weedy European spp.

26a Pressed heads < 8 mm broad, gen with < 30 fls; corolla 3-3.5 mm; suckling c., least hop c.

24 *T. dubium* Sibth.

26b Pressed heads mostly > 8 mm broad, gen with > 30 fls; corolla at least 4 mm

27a Stalk of terminal fllet twice length of those of lateral fllets; heads mostly 8-11 mm broad; stips ovate, joined to petiole for ca half length, width of adnate portion nearly or quite = to length of free tip; hop c.

25 *T. procumbens* L.

27b Stalk of terminal fllet ca = those of lateral fllets; heads mostly much > 1 cm broad; stips linear, often joined to petiole for 2/3 length, width of adnate portion much < length of free tips; yellow c.

26 *T. agrarium* L.

Group III

28a Heads 3-5 cm, gen not so thick; calyx tube with ca 20 prominent nerves, upper teeth curved downward; pl mostly > 5 dm, taprooted; fls reddish-purple, 14-20 mm; meadows and streambanks; Spokane Co, Wn, to Baker Co, Ore, e to adj Ida; Douglas' c. (*T. altissimum* Dougl.)

27 *T. douglasii* House

28b Heads gen as thick as long; calyx ca (5) 10-nerved; pl mostly < 5 dm, sometimes rhizomatous or stoloniferous

29a Fls 5-9 mm; heads axillary; European spp., intro and \pm weedy

30a Corolla white or slightly pinkish; pl stoloniferous; calyx glab; fllets mostly retuse to obcordate; stips 3-10 mm; waste areas to mt meadows; white c., Dutch c.

28 *T. repens* L.